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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/939,717	08/28/2001	Pasi Lahti	108347-00009	2909

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EXAMINER

ABRISHAMKAR, KAVEH

ART UNIT PAPER NUMBER

2131

DATE MAILED: 11/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/939,717

Applicant(s)

LAHTI ET AL.

Examiner

Kaveh Abrishamkar

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 02 September 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-7 and 9-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 and 9-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on September 12, 2005 has been entered.

2. Claims 1-7, and 9-13 are currently pending. Claims 1 and 10 are currently amended, claims 11-13 are newly added, and claim 8 was cancelled.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-7, and 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kouznetsov et al. (U.S. Patent 6,892,241) in view of Clapton et al. (U.S. Patent 6,192,237).

Regarding claim 1,3-7, Kouznetsov discloses:

A method of updating a virus signature database used by anti-virus software (column 5 lines 34-41, lines 55-67 and column 6 lines 41-53); and

sending virus update requests to a network server to identify to the network server updates required by the mobile wireless platform (column 5 lines 34-41, lines 55-67 and column 6 lines 41-53).

Kouznetsov does not explicitly state that this update data is sent via a signaling channel of a mobile telecommunications network to a mobile wireless platform. Clapton discloses a system wherein in mobile units (mobile telephones) can send and retrieve data via Unstructured Supplementary Services Data (USSD) messages or Short Message Service (SMS) messages on a signaling channel on a GSM network (column 5 line 47 - column 6 line 13). Kouznetsov discusses an embodiment of his virus signature update system, which deals with any form, including but not limited to local area networks (LANs) and wide area networks (WANs), but states "any number of networks may be included" (column 3 lines 33-38). Wireless communication is a well-known networking connection medium, and therefore, it is obvious that the virus signature update system presented by Kouznetsov can be extended to a wireless environment. Sending the update on a signaling channel would have also been obvious in light of Clapton's statement, "another benefit for the mobile system is that by the use of USSD a signaling channel can be used, instead of a traffic channel" and further Clapton states, "the use of a signaling channel is therefore a much more efficient usage

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of the spectrum capacity" (column 5 lines 35 - 46). Therefore it would have been obvious to combine the virus update mechanism in a wireless environment of Kouznetsov with the method of sending updates over a signaling channel using USSD messages of Clapton, in order to be able to transmit virus updates to wireless clients in a GSM network while maintaining a more efficient usage of the spectrum capacity.

Claim 2 is rejected as applied above in rejecting claim 1. Furthermore, Kouznetsov discloses:

A method according to claim 1, wherein the update data sent to the mobile wireless platform is a virus signature database update (column 5 lines 34-41, lines 55-67 and column 6 lines 41-53).

Claim 9 is rejected as applied above in rejecting claim 1. Furthermore, Kouznetsov discloses:

A method as claimed in claim 1, wherein said request identifies the current status of a virus signature database (column 5 lines 34-41, lines 55-67 and column 6 lines 41-53).

Regarding claim 10, Kouznetsov discloses:

A method of protecting a wireless device against viruses, comprising:  
maintaining a database of signatures on a device (column 4 lines 13-17, column 5 lines 34-41, lines 55-67 and column 6 lines 41-53);

updating the database by receiving data virus signatures (column 5 lines 34-41, lines 55-67 and column 6 lines 41-53);

searching for virus signatures contained in the database (column 5 lines 34-41, lines 55-67 and column 6 lines 41-53);

sending virus update requests to a network server to identify to the network server updates required by the mobile wireless platform (column 5 lines 34-41, lines 55-67 and column 6 lines 41-53).

Kouznetsov does not explicitly state that this update data is sent via a signaling channel of a mobile telecommunications network to a mobile wireless platform. Clapton discloses a system wherein in mobile units (mobile telephones) can send and retrieve data via Unstructured Supplementary Services Data (USSD) messages or Short Message Service (SMS) messages on a signaling channel on a GSM network (column 5 line 47 - column 6 line 13). Kouznetsov discusses an embodiment of his virus signature update system, which deals with any form, including but not limited to local area networks (LANs) and wide area networks (WANs), but states "any number of networks may be included" (column 3 lines 33-38). Wireless communication is a well-known networking connection medium, and therefore, it is obvious that the virus signature update system presented by Kouznetsov can be extended to a wireless environment. Sending the update on a signaling channel would have also been obvious in light of Clapton's statement, "another benefit for the mobile system is that by the use of USSD a signaling channel can be used, instead of a traffic channel" and further Clapton states, "the use of a signaling channel is therefore a much more efficient usage

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of the spectrum capacity" (column 5 lines 35 - 46). Therefore it would have been obvious to combine the virus update mechanism in a wireless environment of Kouznetsov with the method of sending updates over a signaling channel using USSD messages of Clapton, in order to be able to transmit virus updates to wireless clients in a GSM network while maintaining a more efficient usage of the spectrum capacity.

4. Claims 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kouznetsov et al. (U.S. Patent 6,892,241) in view of Clapton et al. (U.S. Patent 6,192,237) further in view of Latva-Aho (U.S. Patent Pub. US2002/0168111 A1).

Regarding claims 11-13, Kouznetsov discloses:

A method for mobile wireless platform, comprising:

sending a message from a mobile station to an anti-virus server, wherein the message indicates virus signatures stored in the mobile station (column 5 lines 34-41, lines 55-67 and column 6 lines 41-53);

in response to the message from the mobile station, generating return messages at the anti-virus server including virus signatures different from the virus signatures stored in the mobile station (column 5 lines 34-41, lines 55-67 and column 6 lines 41-53); and

sending the return messages from the anti-virus server to the mobile station to update the virus signatures stored in the mobile station (column 5 lines 34-41, lines 55-67 and column 6 lines 41-53).

Kouznetsov does not explicitly state that this update data is sent via a signaling channel of a mobile telecommunications network to a mobile wireless platform. Clapton discloses a system wherein in mobile units (mobile telephones) can send and retrieve data via Unstructured Supplementary Services Data (USSD) messages or Short Message Service (SMS) messages on a signaling channel on a GSM network (column 5 line 47 - column 6 line 13). Kouznetsov discusses an embodiment of his virus signature update system, which deals with any form, including but not limited to local area networks (LANs) and wide area networks (WANs), but states "any number of networks may be included" (column 3 lines 33-38). Wireless communication is a well-known networking connection medium, and therefore, it is obvious that the virus signature update system presented by Kouznetsov can be extended to a wireless environment. Sending the update on a signaling channel would have also been obvious in light of Clapton's statement, "another benefit for the mobile system is that by the use of USSD a signaling channel can be used, instead of a traffic channel" and further Clapton states, "the use of a signaling channel is therefore a much more efficient usage of the spectrum capacity" (column 5 lines 35 - 46). Therefore it would have been obvious to combine the virus update mechanism in a wireless environment of Kouznetsov with the method of sending updates over a signaling channel using USSD



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messages of Clapton, in order to be able to transmit virus updates to wireless clients in a GSM network while maintaining a more efficient usage of the spectrum capacity.

Furthermore, the Kouznetsov-Clapton combination does not teach "concatenated" SMS return messages that update the mobile station when the signatures in the database of the anti-virus server differ from the signatures stored in the mobile station. Kouznetsov discloses sending updated signatures when the version (signatures) of the mobile station are not up to date, and the anti-virus server can send the update in response to an update request of the mobile station. However, Kouznetsov and Clapton are silent on using "concatenated" return messages to send virus signatures updates. Latva-Aha uses concatenated Short messages (C-SMS) to transmit image data over a mobile communications network (paragraph 53). Latva-Aha is analogous art to the system of Kouznetsov-Clapton as both systems transmit data using SMS over a mobile communications network. It would have been obvious to use concatenated SMS messages transmit the virus signatures, because as stated in Kouznetsov, the virus signatures updates are usually in the form of .DAT files (column 6 lines 45-52).

Therefore, if there are a plurality of virus signatures needed to be updated, a single SMS message cannot hold the information. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to use the concatenated SMS messages of Latva-Aha to transmit the updated virus signatures to the mobile station "in order to transmit a larger amount of information (Latva-Aha: paragraph 52).

**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kaveh Abrishamkar whose telephone number is 571-272-3786. The examiner can normally be reached on Monday thru Friday 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on 571-272-3795. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KA  
11/10/2005

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Primary Examiner  
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